

DOCUMENT RESUME

ED 136 329

EA 009 206

AUTHOR Kessler, Bernard M.
 TITLE GAP. Group Analytical Planning Training Handbook. A Systematic Training Program in the Skills of Facilitating Groups in the Process of Educational Planning.
 PUB DATE 73
 NOTE 71p.
 EDRS PRICE MF-\$0.83 HC-\$3.50 Plus Postage.
 DESCRIPTORS Change Strategies; *Educational Planning; Elementary Secondary Education; *Group Dynamics; Interaction Process Analysis; Post Secondary Education; *Self Directed Groups; Training Laboratories
 IDENTIFIERS *Group Analytical Planning

ABSTRACT

This is a comprehensive training handbook for the Group Analytical Planning (GAP) program, a 12-hour program that trains individuals and groups in the skills of group leadership through the process of action-oriented planning. The handbook describes the step-by-step process that groups should follow in order to effectively achieve planned change. Suggestions for implementing GAP include ensuring that the group is representative of the people to be affected by the plan; familiarizing participants with one another; discovering if the group clearly understands its task; sensing if participants need to develop trust relationships; and determining a goal, means to accomplish the goal, and ways to tell if the goal has been achieved. Overall objectives of the GAP program are that the learner will be able to (1) lead groups in planning; (2) train groups in planning; (3) teach and write performance objectives; and (4) list the steps in managing a system, problem-solving, and decision-making. (Author/JG)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

ED 136329

CE 00137

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY.

*PERMISSION TO REPRODUCE THIS COPY-
RIGHTED MATERIAL HAS BEEN GRANTED BY

Bernard M. Kessler
TO ERIC AND ORGANIZATIONS OPERATING
UNDER AGREEMENTS WITH THE NATIONAL IN-
STITUTE OF EDUCATION. FURTHER REPRO-
DUCTION OUTSIDE THE ERIC SYSTEM RE-
QUIRES PERMISSION OF THE COPYRIGHT
OWNER."

GAP

GROUP ANALYTICAL PLANNING TRAINING HANDBOOK

A Systematic Training Program in the Skills of
Facilitating Groups in the Process of Educational
Planning.

By: Bernard M. Kessler,
Associate Director

Regional Educational Planning Office
740 West Boston Post Road
Mamaroneck, New York 10543

Copyright: Bernard M. Kessler, 1973

Bernard M. Kessler is an educational consultant with extensive experience in industry and education. He has been a corporate vice president, an elementary school teacher, teacher trainer, curriculum project director and management consultant. At present, he is Associate Director of the Putnam-Westchester Regional Educational Planning Office. He is the former Manager of Educational Systems and Services of the Olivetti Education Center, Olivetti Corporation of America, Tarrytown, New York.

ACKNOWLEDGEMENTS

GAP owes its existence to the more than two hundred participants who were willing to experiment with the process in the Project Redesign effort in the Mamaroneck, New York Public Schools. Additional experimentation took place at Fordham University's School of Education, the New Rochelle Public Schools, Long Island Public Schools located in Nassau County.

The reader who has had the fortunate experience of participating in a workshop led by Perry Crawford of IBM will recognize how much GAP owes Mr. Crawford.

A very special thanks must be extended to my close associates: Dr. Otty R. Norwood, Superintendent of Mamaroneck Public Schools, Dr. Calvert E. Schlick, Jr., Assistant Superintendent for Instructional Services and Redesign Coordinator in the Mamaroneck Public Schools, Corinne Mastruzzi, Administrative Assistant to the Mamaroneck Redesign Coordinator, Donald Weitzman and Paula Barnak, Educational Consultants and John MacGregor, Director of the Putnam-Westchester Regional Educational Planning Office, White Plains, N.Y., and Miss Marilyn Macchia, Director of the Career Education Project in Westchester County, all of whom continue to work to make GAP a useful and productive tool for meaningful planned educational change.

Bernard M. Kessler

April 30, 1973

PREFACE

Group Analytical Planning is a step-by-step process groups follow to achieve creative planned change. It helps groups who have not been able to develop action plans to do so.

Group planning meetings have a reputation for being time consuming and of low productivity. Most meeting-goers agree it is a reputation well earned. Yet meetings are called and people continue to attend.

For all of the low efficiency rating of the group planning meeting, there is a greater demand than ever before to call diverse groups of people together in order to plan educational programs or solve problems. The public schools, in particular, are finding it increasingly necessary to respond appropriately to the ever-growing demands of the community to share in school planning.

Industry, government, and a small but increasing number of educational institutions are applying the techniques of "Program Management", a systems approach, to plan for the future growth and vitality of their respective organizations. Briefly, the techniques employed in Program Management make use of a variety of specialists temporarily relieved from their assigned departments and brought together to design future programs or products. The planning task force is managed by a "generalist", i.e., a professional manager who, like the other task force members, goes on to another assignment once the planning group's mission objective is achieved.(1)

(1) Kazmier, Leonard J., Principles of Management, Second Edition, McGraw-Hill Book Co., New York, 1969

The group analytical planning techniques successfully employed by such professional systems designers are the basis for Group Analytical Planning.

OBJECTIVES OF THE GROUP ANALYTICAL PLANNING TRAINING SYSTEM

1.0 Upon completion of reading this book you will be able to recall and comprehend:

- 1.1 The steps in planning.
- 1.2 The steps in problem-solving.
- 1.3 The steps in decision-making.
- 1.4 The elements of a performance objective.

2.0 After applying the GAP process with a planning group you will be able to:

- 2.1 Lead groups in planning.
- 2.2 Train groups in planning.
- 2.3 Teach and write performance objectives.
- 2.4 List the steps in managing a system.
- 2.5 Apply the steps in planning.
- 2.6 Apply the steps in problem-solving.
- 2.7 Facilitate groups to apply steps in problem-solving.
- 2.8 Apply the steps in decision-making.
- 2.9 Facilitate groups to apply the steps in decision-making.

Thousands of hours of successful group planning sessions in Mamaroneck, New Rochelle, and Long Island, New York, working with students, teacher groups, administrators, board of education members, non-professional staff and community have proven GAP's effectiveness.

The reason you will not learn the entire GAP process upon completion of the book is simply that Group Analytical Planning depends upon group process, that is the interaction of people, for its total effectiveness. Whereas this is GAP's greatest strength, it leads to a paradoxical problem: How can someone interested in learning the GAP process do so

without going through the process? The answer is: he or she cannot.

GAP can only be learned by doing. As a mere intellectual exercise, it is dry, unrewarding and frustrating. It lacks the emotional content that group process depends upon for its vitality. To be trained in GAP means to have worked with the process with real people and real problems. Like the medical doctor, the GAP facilitator must eventually learn his or her skills working with real people and real problems.

Perhaps the best way to learn GAP is working in a group with an experienced GAP facilitator. Lacking that, you can learn GAP by using this book and applying the step-by-step procedures with a small (10-15) friendly group.

WHAT YOU HAVE LEARNED SO FAR

Thus far you have learned: (1) why GAP is useful, (2) how it came to be, (3) some things you can expect to learn from this book, (4) some things you can expect not to learn from the book alone, and (5) what you can expect to learn by actually applying GAP in a real planning situation.

There are four more things this book is not about.

WHAT THIS BOOK IS NOT ABOUT

NOT #1: It is not about why you should be concerned with planned change. For more information about that, we refer you to the vast body of literature critical of our institutions in general, our schools in particular.

For more information concerning planned educational change, please refer to Project Rcdesign.(1)

NOT #2: It is not about managerial theory building. For that, we refer to SELECTED READINGS, pages 50 - 51.

NOT #3: It is not just about the systems approach to management. For that, we refer you to "NOT #2".

NOT #4: It is not a book about group process. For that, we refer you to the National Training Labs.(2)

Group Analytical Planning is a book that, while responding to "NOT #1", and incorporating "NOT #'s 2, 3, and 4, grew organically in a school system dealing with real problems. This book is being written because Group Analytical Planning, more popularly known as GAP, works with real people in real planning situations.

(1) Dr. Bernard F. Haake, Assistant Commissioner for Instructional Services (General Education), Project Redesign, The State Education Department, Albany, New York 12224

(2) NTL Institute for Applied Behavioral Science, 1201 Sixteenth St. N.W. Washington, D.C. 20036

WHY AND HOW GAP CAME ABOUT

If you are not interested in this background information but would like to push on with the learning process itself, please turn to page 7.

The Mamaroneck Public Schools was designated a Redesign district in 1971. Redesign is defined as, "a comprehensive, systematic process of planned change involving the broad-based participation of a total community in the examination and redefinition of its educational needs and goals". Since Project Redesign is so dependent upon the collaborative efforts of the community and schools, the Redesign Steering Committee of the Mamaroneck Public Schools was most anxious to develop a planning system that could yield greater results in group planning efforts.

After viewing a variety of planning systems, the Redesign Steering Committee and the Superintendent of Schools, Dr. Otty R. Norwood, decided to commission the Redesign consultant to develop a planning system that was particularly suited to the district's planning needs.

The consultant, Bernard M. Kessler, and Dr. Calvert E. Schlick, Jr., Assistant Superintendent for Instructional Services, in the Mamaroneck Public Schools, led various groups through the process that was to become Group Analytical Planning, GAP.

An outline of GAP was made available to the school district and has since been field tested and refined.

PUTTING ACTION INTO EDUCATIONAL GOALS

In a three-year community based effort, the Mamaroneck Public Schools had developed the following statement of goals:

1. AN EDUCATIONAL CLIMATE WHICH EMPHASIZES THE INDIVIDUAL WORTH AND CREATIVITY OF EACH STUDENT AND FOSTERS THE VALUES OF SELF-RELIANCE, STANDARDS OF DISCIPLINE, AWARENESS OF OTHERS, RESPONSIBILITY TO SOCIETY AND THE ENVIRONMENT, AND A POSITIVE ATTITUDE TOWARD LEARNING.
2. A VARIETY OF TEACHING STYLES AND CONTENT WHICH WILL BEST MEET THE RANGE OF NEEDS FOR EACH STUDENT'S GROWTH IN ALL LEARNING EMPHASIZING THE BASIC SKILLS.
3. A QUALITY OF RESPONSIVE INTERNAL AND EXTERNAL COMMUNICATION WHICH WILL BEST REINFORCE THE LEARNING PROCESS AT ALL LEVELS, AND IDENTIFY AND FULLY UTILIZE THE EDUCATIONAL RESOURCES OF THE COMMUNITY.
4. A STYLE OF MANAGEMENT WHICH WILL INSURE EFFECTIVE PLANNING FOR DESIRABLE CHANGE, EFFICIENT OPERATION OF THE SYSTEM AND CONTINUOUS EVALUATION OF RESULTS.

It became the task of the Redesign Councils (the designated planning groups) to turn these broad, philosophical aspirations into an acceptable action plan.

WHY GAP WORKS

GAP deals very directly with the major causes of group planning failures and thereby increases group planning productivity. The major causes of failure are: emotionalism, confusion of means and ends, defensiveness and divisiveness.

GAP deals most effectively with emotionalism by providing for meaning and purpose in a task-oriented environment. Each contribution, however emotional, is valued.

Means and ends are separated so that each participant has a clear vision of the difference.

Defensiveness is not easily dealt with in any group setting. Experience has taught us, and the research literature validates the fact, that a high degree of defensiveness will seriously hamper group planning.

Divisiveness. If a member or members of the planning group do not share any part of the group's goals, divisiveness occurs. There is no known solution for maintaining the working relationship, except that it makes sense for those people who do not share a group's goals not to participate. Their continued participation tends to destroy the group's efforts.(1)

The GAP environment is an open and trusting one in which each contribution is valued.

The basic thrust of GAP is task-orientation. It is intended to be used by people who are serious about their desire to get the job done.

(1) Argyris, Chris., Interpersonal Competence and Organizational Effectiveness; Richard D. Irwin Inc., Dorsey Press Inc., Homewood, Ill., 1962

The GAP environment has five advantages. The first is that each participant has the opportunity to use a greater degree of creativity than usually applied.

GAP generates more ideas.

The group solves problems that elude solution by other means.(1)

Feedback is constant and self-rewarding to the individual and the group.

GAP helps the individual channel his logic and reasoning power towards group goals.

The GAP process harnesses the forces of openness, trust, creativity, logic, emotionality and what may even appear to be irrationality in order that the group's future educational goals may be served.

(1) Newman, William H., Sumner, Charles E., Warren, Kirby E., The Process of Management (Second Edition); Prentice-Hall, Englewood Cliffs, N.J.; 1967

GAP LEADER'S GUIDE

As the GAP leader, it is your responsibility to develop an atmosphere of openness and trust while proceeding in a business-like way. The following suggestions will help you achieve these goals.

Step 1: A comfortable, well-lighted room is required.

Seat participants in comfortable chairs, preferably in a semi-circle facing you. A supply of coffee and/or soft drinks is a desirable option. Participants should feel free to avail themselves of the refreshments at any time.

You will require a pad of large-size easel paper approximately 26" x 32". Three felt-tip markers in red, green and black are required. Make sure the nib is at least 1/4" wide at its widest point. A roll of masking tape is necessary; any size from 1/4" to 1" is acceptable. Prior to the meeting, tear forty to fifty strips of tape about 1 1/2" long. Stick them lightly to the edge of a table so they will be convenient to you. You will use the tape strips to fasten the sheets of easel paper to a wall or other flat surface.

Step 2: Be sure that your planning group is representative of those people who will be affected by the plan. This could lead to large size groups. The question of group size is a difficult one to resolve. Obviously, if the group gets too large, planning becomes more difficult. However, this process has been used with groups as large as three hundred people. During the initial planning stages, this is possible. But, in the advanced stages of planning, smaller task forces of five to ten people are desirable to speed up the

process.

Step 3: Be sure everyone in the planning group knows everyone else. Tell the group members that if they see someone in the room they do not know to approach that person and introduce themselves.

Step 4: Seat the group and ask everyone to introduce themselves and state their affiliation.

Step 5: Does the group clearly understand its task and expected outcomes? Do not take any chances on this point. Ask the group to state the task and outcomes. Record the statement on a sheet of easel paper and fasten it to the wall.

Step 6: Please prepare in advance of the meeting, a visual outline on the easel pad of the GAP process.* (See page 39 for details.) Reproducing pages 33 - 38 as well as page 39 for each participant is a desirable option. Go over the process with the group. Then fasten the sheet to the wall.

Step 7: At this point, you, the group leader, have an important decision to make. Do you have reason to believe that, as a group, the participants need additional time to develop trust relationships? Do you sense that they share common concerns and needs, but may not be consciously aware that they do? If so, head your next sheet of paper, WHAT EXISTS, using the green marking pen. Then write the numeral one with a period after it, i.e.; 1. Ask the planning group to describe what it is that they are already aware of. For example, if the group were planning a new program, they would first describe the present program. As soon as the first person begins to describe what exists, as the meeting leader, write it down alongside

* A ten-minute audio/visual presentation is available for a modest rental fee from Mamaroneck Public Schools.

the numeral one exactly as it was dictated to you. If necessary, ask the participant to restate his contribution. As soon as you have finished writing his contribution, write the numeral two with a period after it, i.e.; 2. This will give the planning group a visual clue that you expect and respect their contributions.

People very often come to a meeting to complain about their schools. By asking them to describe the present realities, it helps develop a more objective, positive, and constructive attitude towards the present system and planned change.

There is no fixed time as to how long this step should take; it is a variable, dependent upon the program under discussion, and the size of the planning group.

After a while, it may seem apparent to you as a group leader that there is a redundancy in the statements. It is important that you do not point this out directly. From time to time, re-read each statement. The group will discover the redundancies; some may suggest a consolidating process. This is not really necessary for this step, but will be important when the changes are planned. If the suggestion is made, inform the group that later in the process there will be time set aside for consolidation. However, when such moves are suggested, it is often a sign that the group is ready to move on to the next step. As each sheet of paper is completed, affix it to a flat surface in the room with the strips of masking tape.

Step 8: WHAT EXISTS is followed by NEEDS AND CONCERNS. NEEDS AND CONCERNS deal with what people feel deeply can or should exist. The simple invitation on your part of, "What are your needs

and concerns regarding our task?" is usually all that is required to start. Using the red marking pen, head a sheet accordingly. Write the numeral one down and follow the same procedure as WHAT EXISTS to develop the record of the group's NEEDS AND CONCERNS. Again, put the completed sheet on the wall in a group.

Once again, resist the use of a large block of time for consolidation with the understanding that this is an indication that the group is ready to move on.

Step 9: It might be assumed that when a group of people gets together they have a common mission. Ask the group to develop in as few words as possible their MISSION OBJECTIVE. The MISSION OBJECTIVE is the answer to the questions: "Why are we here?, Why do we exist?, Why should we exist in the future?" This latter question is the essence of the MISSION OBJECTIVE. It is a philosophical statement that describes the ultimate goal that the planning is to achieve. If your group has gone through a session of WHAT EXISTS and NEEDS AND CONCERNS, they may find it relatively easy to come to grips with and subsequent resolution of their MISSION OBJECTIVE. If not, there might be a long and free-ranging discussion. It will be up to you to function as a scribe for the group, making notes on what is said on sheets of paper. At this point, you will be using a black marking pen on a sheet of paper headed, MISSION OBJECTIVE.

Every now and then, read each of the numbered statements to the group encouraging them to consolidate into a single statement of mission, however long the statement.

Very often, a group that has not had a chance to work together, but who do share common goals, finds it difficult to develop a consolidated statement; sometimes much more as a result of a lack of procedure than of a lack of trust. The following procedure has proven efficient in resolving that problem: a) Ask each person to write his MISSION OBJECTIVE at his seat; b) Ask him to share with one other person of his own selection their two statements and consolidate them, c) Each group of two is to meet with one other group of two for further consolidation, d) Each group of four then meets with another group of four, etc., until there are only two remaining groups to meet for the final consolidation. The MISSION OBJECTIVE is then written on the sheet so labeled and given the number: 1.0.

Step 10: Solicit from the entire group the answer to the question, "What must we do in order to achieve our MISSION OBJECTIVE?" This sheet of paper is headed with the word, WHAT? and the responses written in black are numbered 1.1, 1.2, 1.3, etc. Continue in the same manner and tone described in the WHAT EXISTS section, Step 7. The following instructions are imperative: Explain that they are to suggest ideas in the form of objectives without consideration of possible restrictions. This is the time to create! You have to help them drop conventional inhibitions and range freely through their ideas. There will be a tendency for participants not only to say what objectives they would like to see in the planning, but will in the same statement suggest the means by which to achieve the objective. For example, someone might suggest: "I think that our

schools have got to provide children with more creative experiences through a better program of creative writing." As the group leader, you will have to recognize that the first half of the statement is a WHAT OBJECTIVE, but the second half is a HOW OBJECTIVE. "I think that the schools have got to provide children with more creative experiences" is the WHAT OBJECTIVE, and "Through a better program of creative writing", is the HOW OBJECTIVE. Before beginning the WHAT OBJECTIVE, explain to the planning group that you will write down all of their WHAT OBJECTIVES exactly as indicated, but HOW OBJECTIVES, i.e., the means to the WHAT OBJECTIVES, will be handled next and separately. This will also give you another opportunity to review with the group the entire planning outline (see page 39) that you have previously taped to the wall.

Therefore, it will be necessary for you to point out the differences between the WHAT (ends statements) and HOW (means statements) OBJECTIVES.

Two other common statements have to be sorted out by the group leader. Again, the ground rules would already have been explained to the group by you and should be taped to the wall. Any and everyone's suggested WHAT OBJECTIVES should be written on the large sheets of paper. If someone makes a statement that is diametrically opposed to someone else's statement, it is to be written down as a WHAT OBJECTIVE. Explain to the group that they will be resolving these conflicts when they suggest and discuss their HOW OBJECTIVES. There is built into the HOW OBJECTIVES planning section a method of REALITY TESTING the objectives. Continue to explain to

the group that they will find some of the suggestions will have to be dropped or modified based upon the realities of time, money, personnel, etc., far more often than as a result of personal option.

A typical situation of conflicting WHAT OBJECTIVES might be: "1.22 - To provide more freedom for children." A participant might respond to this with: "Children already have too much freedom in schools so we should not give them more freedom." Ask the latter respondent to restate the statement as an objective so you can write it down. Encourage responses such as: "To provide more classroom discipline."

From time to time a participant will make a long disjointed statement in an effort to describe his deeper feelings. Always wait for him to finish, then ask him if he can restate what he said as an objective, dictating it to you. If this is still too difficult for him to do, offer him the marking pen, ask him to come up and write it himself. This is a good move for more than one reason. First of all, it helps resolve the problem at hand, but perhaps more importantly, the action indicates to the group that there is no authority in your role as leader. It helps the group understand that you are there simply to facilitate their planning needs and not as a content expert. Take whatever opportunities you can to turn your duties over to other members of the group. If this planning group is going to work together a length of time, sharing the leadership role will help develop the openness and trust required while maintaining respect for the business-like structure of GAP.

Step 11: HOW OBJECTIVES - Ask the group to select one of the WHAT OBJECTIVES. Any objective will suffice. Do not be surprised if the group takes quite a bit of time to make the selection. While encouraging them to move to a choice, you must be careful to avoid being seen by them as negative or critical. Let us assume the planning group decides on WHAT OBJECTIVE 1.22, "To provide more freedom for children." Ask the group the ways they suggest this can be done.

Record and display the HOW OBJECTIVES just as you did the WHAT OBJECTIVES. The numbering system for the HOW OBJECTIVES is a continuation of the WHAT OBJECTIVES numbering system. Using the same example, the first suggested HOW OBJECTIVE for WHAT OBJECTIVE 1.22 would be numbered 1.22.1; the second 1.22.2, the third 1.22.3, etc.

Once you sense a kind of lag or uneasiness in the group, it will be time for REALITY TESTING. A clue might come if you hear someone say something like, "Well, all this certainly sounds good, but I don't see how it is possible."

Ask the group to suggest a HOW OBJECTIVE for REALITY TESTING. Let us assume that one of the WHAT OBJECTIVES was 1.8, "To meet the individual needs of children." , and 1.8.9 in the HOW OBJECTIVES is, "To reduce class size." Rewrite the HOW OBJECTIVE on a separate sheet of paper with columns as follows:

1.8.9: To reduce class size

<u>Constraints</u>	<u>Opportunities</u>
1.	1.
2.	2.
3.	3.

Ask the group to suggest possible constraints to the achievement of 1.8.9 "To reduce class size", then the opportunities. You write them under the appropriate headings.

When they have completed this exercise, you will have found that the group has made a judgement as to whether or not the HOW OBJECTIVE is feasible, and if so, under what conditions. Having done this, the group will have done one of three things: 1) maintained the objective as originally stated, 2) changed it so that it becomes a viable alternative, 3) discarded it.

Constraints and Opportunities is followed by a look at Ramifications. Ramifications deals with the answers to the questions, "What and how will other parts of the system be affected if we pursue this course of action?".

There are special techniques for weighing constraints vs. opportunities and ramifications. For those group leaders who are interested in further study, refer to footnotes.*

* Kazmier, Leonard J., The Principles of Management, McGraw-Hill Book Co, New York, 1964

* Kessler, Bernard M., "Behavioral Mappings", an unpublished paper, Board of Education, Mamaroneck Public Schools, 740 W. Boston Post Road, Mamaroneck, N. Y. 10543, 1972

SUMMING UP

By now, we have taken care of the question of why the planning group is gathered by means of the MISSION OBJECTIVE, what the planning group could aim at through the WHAT OBJECTIVES, how to achieve them through the HOW OBJECTIVES; and REALITY TESTING. It is now necessary to specify when the plan will take place, where, and by whom. For example, if we have agreed we can reduce class size, REALITY TESTING would have yielded the information as to the reduction. For the sake of the example, we shall assume that the class sizes should be reduced from thirty-two to twenty-seven children per classroom. The question of when would have to be answered at this point. Will it be this school year, next school year, or the year after? A target date should be specified.

Where will it take place? In the elementary schools, middle school, high school? All of them or some of them? Who will be responsible for the move?, etc.

As each HOW OBJECTIVE proceeds through REALITY TESTING and the resulting WHERE, WHEN and WHO OBJECTIVES are added to achieve increasing specificity, PERFORMANCE OBJECTIVES will rapidly accumulate. It will then become the group's task to develop these PERFORMANCE OBJECTIVES into a system of priorities. At this point, with their GAP experiences, the group will have developed sufficient data to make recommendations and/or decisions concerning priorities.

The next step is the writing of the plan. There are many work-plan formats from which to choose.(1, 2, 3)

- (1) Kazmier, Leonard J., The Principles of Management, McGraw-Hill Book Co., New York, 1964
- (2) Mager, Robert F., Preparing Instructional Objectives, Palo Alto, California, Fearon Publishers, 1962
- (3) Odiorne, George S., Management by Objectives, Pitman Publishing Corp., New York, 1971

Whichever your group decides upon, they will find their type-written copies of the various GAP sections invaluable as the place to begin. The writing of the plan, usually a difficult and time-consuming task, will proceed with relative ease and dispatch.

This is the point in the plan when all the loose ends are tied together so that tasks, responsibilities and authority are assigned and understood by all.

Finally, it will be necessary to develop a system of diffusion, feedback and evaluation. With objectives and means clearly stated; and tasks, responsibilities and authority understood, the planning group has provided the school system with an excellent foundation for diffusion, feedback, evaluation and renewal.

The following experiences from a series of Career Education workshops demonstrate the Group Analytical Planning process.

An average of ten workshop participants attended each session. These sessions were led by the author, Don Weitzman, and Paula Barnak. We are grateful to Marilyn Macchia, the Director of the Career Education Program in Westchester County, who was kind enough to share this material with us.

CAREER EDUCATION WORKSHOP

WHAT EXISTS

1. Nothing exists that is planned.
2. Work Experience Program. (Definition - Work Experience Programs may be simply programs which grant credit to students for working. They may be supported by seminars or conferences. However, a cooperative work program is supervised by a coordinator of occupational education, who also meets daily with students and teaches them the related course of study recommended by the state. The course of study consists of learning how to apply for a job, how to fill out your income tax, the purpose of the W-2 form, social security information, etc.) (Mamaroneck, Port Chester).
3. Occupations and Career Class which is an exploratory class. (Rye High School).
4. Since we are a component of BOCES (Board of Cooperative Educational Services), we have students attending the Occupational Center at Valhalla, studying a particular program (Rye High School).
5. Port Chester has about 20 students that are described in 3 and 4.
6. Mamaroneck has 7 students in Occupational Education Programs at BOCES.
7. Rye - unstructured work-study program.
8. Rye - Career Exploration Week - Middle School.
9. Port Chester - all schools have something which they can identify with Career Education.

10. In Mamaroneck we have the beginnings of Career Education.
11. I've seen more career-oriented college programs - especially in the 2 year colleges. Also, more in the 4 year
12. Field trips in elementary schools, day care, etc.

This group agreed that their description of what exists in the present school systems did not necessarily reflect all of their needs and concerns. They, therefore, very appropriately moved on to the next step. It is important for planning groups to keep in mind that GAP is a systematic planning track which provides a structure and limits. However, it should not become a planning "straight jacket".

NEEDS AND CONCERNS

1. That career education has to be clearly identified. While it is not synonymous with Occupational Education, it includes it.
2. Occupational Education is a dump.
3. How we can make Career Education palatable for everyone in the community especially parents.
4. I think it is important that we make career education attractive to all students in the high school.
5. In my opinion many of the things that parents and teachers and students are asking for are not what they "buy" in school.
6. I am concerned that we do not utilize the summer months.
7. We have got to get over to parents that this career education "across the board" program dealing with students terminating in the 12th grade and not terminating in the 12th grade.
8. To provide students with an alternative to college.
9. This program will be one in which a partial goal will be to deal with changing the traditional American educational philosophy - class structure.
10. We want to provide the community with the vehicle to achieving their ends.

11. We want to help kids cope with change - the ability to change and adapt.

MISSION OBJECTIVE

- 1.0 TO DEVELOP IN ALL STUDENTS A MATURE FLEXIBILITY FOR CHANGE, AN AWARENESS OF THEMSELVES AND THE EVER-CHANGING WORLD OF WORK, AND TO ESTABLISH RESPECT FOR THE CAREERS OF OTHERS AS EACH STUDENT REALIZES HIS OWN POTENTIAL TO THE FULLEST EXTENT.

WHAT OBJECTIVES

- 1.1 Find out what programs exist (throughout county).
- 1.2 Have students involved in changing their life in the schools.
- 1.3 To have students be active participants in developing career education programs in the schools.
- 1.4 To develop pre-requisite courses related to the world of work.
- 1.5 To develop alternative programs quickly.
- 1.6 To create in everybody an understanding of the inter-relationship of the various fields of work.
- 1.7 Group and individual counseling to have students understand themselves.
- 1.8 To provide students experiences in the world of work.
- 1.9 To provide experiences and appreciation for careers and occupations.
- 1.10 To involve faculty, students, parents and community.
- 1.11 Setting up advisory committee.
- 1.12 Having a career education counselor.
- 1.13 To provide representatives from all the occupational fields - to bring them into schools.
- 1.14 Career Guidance.
- 1.15 To develop programs which are formulated through the participation of community members, parents, teachers and students.

- 1.16 To insure that all students graduating from high school have skills for employment.
- 1.17 To make as many students as possible active participants in the working society.
- 1.18 To provide students with the opportunity to participate in actual work experience(s) and in community services related to their current career interests.
- 1.19 To provide community employers with the opportunity to train students for future employment.
- 1.20 To provide students with the opportunity to be trained by someone who may offer them future employment.
- 1.21 To provide all students with the opportunity to explore careers and examine them in depth.
- 1.22 To enable a student to broaden his future options so that he may meet the demands of a rapidly changing society.
- 1.23 To enable students to make choices based on interest and/or abilities rather than environmental pressures.
- 1.24 To encourage students to investigate careers related to their interests.
- 1.25 To put occupational education programs for terminal students on an equal footing with the college preparatory programs.
- 1.26 Program students so that occupational education will in no way limit the possibility of post-high school education.
- 1.27 To develop programs around a structure that can adjust to change and a variety of teaching and learning styles.
- 1.28 To train community, students and staff to develop programs.
- 1.29 To enable students to pursue vocational, avocational and academic interests simultaneously, relating the three.
- 1.30 To enable students to learn at their own rate.
- 1.31 Students entering the world of work upon graduation will be able to apply for the jobs of their choice.
- 1.32 Elementary school students will explore careers of all kinds in order to understand the world of work.
- 1.33 Students in the middle school will participate in career exploration programs.

- 1.34 To develop methods of building into the schools, systems for training students in the skills necessary for them to be active participants in determining the specifics of their own educational experiences.
- 1.35 To re-educate teachers who will then be able to develop and work in learning centers which offer a non-graded, individualized, student centered curriculum.
- 1.36 To have members of the business community become active participants in the process of public education.
- 1.37 That every student has a work experience prior to graduation from high school.
- 1.38 Students should be aware of how the world of work affects the world of leisure.
- 1.39 To provide a general information center, probably at the high school level, in cooperation with college information in which all printed materials relative to careers can be put into usable form for the entire school system.
- 1.40 To select key teachers to carry out the program.
- 1.41 To develop a good training system to train the teachers in the school system to carry out this program.
- 1.42 To set up a method of diffusion (through training of teachers).
- 1.43 To train pupil personnel staff members to be the vehicle to carry out this program rather than teachers.
- 1.44 To solicit the interest and cooperation of the administration and the Board of Education.
- 1.45 To develop in every school system involved an employment service for students.
- 1.46 To define the scope of work experience.
- 1.47 To examine existing curricula in terms of career education.

HOW OBJECTIVES

- 1.10 To involve faculty, students, parents and community.
- 1.10.1 Set up advisory committees.
- 1.10.2 Publicize the program.

- 1.10.3 Have an assembly on career education.
- 1.10.4 Make formal presentations to civic groups, faculty, PTA, Board of Education and other ancillary groups.
- 1.10.5 Invite members representing occupations/professions to speak to classes.
- 1.10.6 Send out letters to corporations, major business concerns inviting them to participate.
- 1.10.7 Set up a community resource file.
- 1.10.8 Develop career library.
- 1.10.9 Set up a newsletter.
- 1.10.10 Coordination between counselor and teacher in reference to classroom methods and procedures.
- 1.10.11 Need to have further workshops for faculty.
- 1.10.12 Need workshops for community and students, together and separately.
- 1.10.13 Be very cautious and careful not to over-theorize and get down to the practical.
- 1.10.14 Solicit volunteers.
- 1.10.15 Actively recruit others.

REALITY TESTING

- 1.10.4 Make formal presentations to civic groups, faculty, PTA, Board of Education and other ancillary groups.

CONSTRAINTS

Dollars
 Availability of enough informed people
 Time
 Making contacts

OPPORTUNITIES

Money in proposal
 Three-year proposal
 Have key people make contacts for you
 May lead to other sources of funding

PERFORMANCE OBJECTIVE

- 1.10.4 (Who, When, Where)

By January 15, 1973, the project supervisor (or his designee) will formally present an overview of career education to his faculty K-12. This formal presentation will be followed by an overview letter by January 30th.

PLANNING FOR YOUR FIRST GAP MEETING

Begin by reading GAP in its entirety. It will have been helpful to you if you have previously been a member of a GAP group. Lacking that, for your first attempt, you should try working with a small (10 - 15), friendly group of people. The only way to learn GAP is by doing. The Chinese proverb: "I hear and I forget, I see and I remember, I do and I understand", is appropriate to learning how to be a GAP leader.

Begin each statement with a clear statement of purpose and techniques that will be employed. Make clear to the group what the ground rules are. These are clearly stated in the GAP Leader's Guide section. Basically, they are: (1) Everyone's suggestion is written down once it is phrased as an objective, (2) Statements of means are held until the HOW OBJECTIVES section, (3) Objectives, however contradictory to previously stated objectives, are to be recorded by you as submitted by the group in both the WHAT OBJECTIVES section and the HOW OBJECTIVES section

Once the rules are established, it is up to you as the GAP leader to maintain the rules. When there are long pauses, you will have to resist the temptation to suggest the next objective. You may choose to encourage the participant to continue to contribute, but the wisest and safest course to follow is to be quiet and wait patiently.

Your function is primarily as a facilitator of the process and recorder of events. This should be made perfectly clear to the group.

Look for every opportunity you can to turn over the recording duties to other members of the group. It is important that you help the group self-actualize. Please remain with the group to continue to facilitate the process. Since the new recorders will not have had the opportunity to have been trained in the GAP process, or to have read this handbook, the planning session can become an effective means by which to train each participant in the GAP leadership role by emulating your leadership style.

It is impossible to determine in advance just how long the total plan will take to produce in written form. That is very much a function of the scope of the plan, the size of the group and the intensity of feelings. Experience has indicated that it is possible to develop a written plan in as little as four hours.

Since planning is a fatiguing activity, provide the group with a break about every hour-and-a-half.

At the end of any given planning session, restate the objectives for the session and the group's accomplishments. Ask the group to decide on what its next steps will be, e.g., where to meet, when to meet, etc.

Arrange to have the materials from the large sheets of paper typed, reproduced, collated and returned to the GAP group within twenty-four hours, if possible.

As you gain experience with GAP you will make your own

refinements. As the group gains more experience with GAP, they will find that many of the formal aspects of the program can be either eliminated completely or at least many short-cuts will become apparent. This is possible only once the group has had the opportunity to experience each of the GAP processes. It is desirable to provide each member of the planning group with a copy of GAP.

Finally, the only effective way to learn GAP is by doing GAP. It has worked for others. It can work for you!

GAP MEETING LEADER'S CHECKLIST

The following checklist is designed to help you plan and conduct GAP sessions. It has the added purpose of providing each member of GAP with a guide of what to expect and how the meetings are to proceed.

- 1.0 Explain GAP
- 1.1 Explain GAP ground rules
- 2.0 Make sure everyone has met
- 3.0 Make sure everyone understands the task at hand
- 4.0 WHAT EXISTS
- 5.0 NEEDS AND CONCERNS
- 6.0 MISSION OBJECTIVE
- 6.1 WHAT OBJECTIVES
- 6.1.1 HOW OBJECTIVES
- 6.1.1.1 CONSTRAINTS, OPPORTUNITIES AND RAMIFICATIONS
- 6.1.1.1.1 ALTERNATIVES
- 7.0 WHEN?
- 7.1 WHERE?
- 7.2 WHO?
- 8.0 Go back to the unfinished WHAT and HOW OBJECTIVES and consolidate, if necessary
- 9.0 REALITY TESTING of remaining objectives
- 10.0 Complete WHEN? WHERE? and WHO?
- 11.0 Establish priorities of Performance Objectives
- 12.0 Develop written plan
- 13.0 Submit plan for implementation

- 14.0 Diffuse plan
- 15.0 Implement plan
- 16.0 Evaluate results
- 17.0 Renew and revitalize plan

POSTSCRIPT TO GAP

GAP is also an effective problem-solving technique. A problem is defined as an obstacle to a desire objective. By resolving the problem the objective should be achievable. Of course, if the problem is poorly defined or mis-defined the group's work will be wasted. Perhaps, the most common mistake in problem-solving groups is poorly defined problems.(1) For example, if students are cutting class, it would be important to know why. Without this information, the decision-making revolves around solutions to the cutting, a symptom rather than the cause. Effective problem-solving deals with primary causes whenever possible.

(1) Kepner, Charles H., Tregoe, Benjamin, The Rational Manager, McGraw-Hill Book Col, New York, 1965

GAP SHORT FORM FOR PROBLEM-SOLVING

This format of Group Analytical Planning has application when the group understands very clearly the problem to be resolved and can answer the following:

1. What do we want to accomplish?
2. What information do we need?
3. What will what we are planning look like when it is done?
4. What is keeping us from doing it?
5. What do we need to do to get it done?
6. Who will do it and when?
7. How will we know it has been accomplished?

It is suggested that each question head a separate sheet of newsprint and be placed around the room before the meeting begins.

GAP PERFORMANCE OBJECTIVES LOGIC TREE

To help conceptualize GAP, the following objectives logic "tree" is offered. A plan answers the questions:

WHY?
WHAT?
HOW?
WHEN?
WHERE?
WHO?

GAP organizes these questions as follows:

	Description	GAP Title	Examples
WHY?	The philosophical answers to the question: "Why are we to exist?"	Mission Objectives	1.0: To provide quality education for our community
WHAT?	The answers to the question "What must we do to achieve a Mission Objective?"	What Objectives	1.1: To reduce class size 1.2: To hire qualified teachers 1.3: To run the schools more efficiently 1.4: etc. 1.5: etc.
HOW?	The answers to the question: "What must we do to achieve the WHAT OBJECTIVES?"	How Objectives	1.1: To reduce class size 1.1.1: To hire more teachers 1.1.2: To hire more teacher aides 1.1.3: To use more volunteers 1.1.4: etc. 1.1.5: etc. 1.2: To hire qualified teachers 1.2.1: To recruit from a selected list of schools of education 1.2.2: To use a selection agency 1.2.3: To test candidates 1.2.4: To observe all candidates 1.2.5: etc. 1.2.6: etc.

GAP PERFORMANCE OBJECTIVES LOGIC TREE.....(continued)

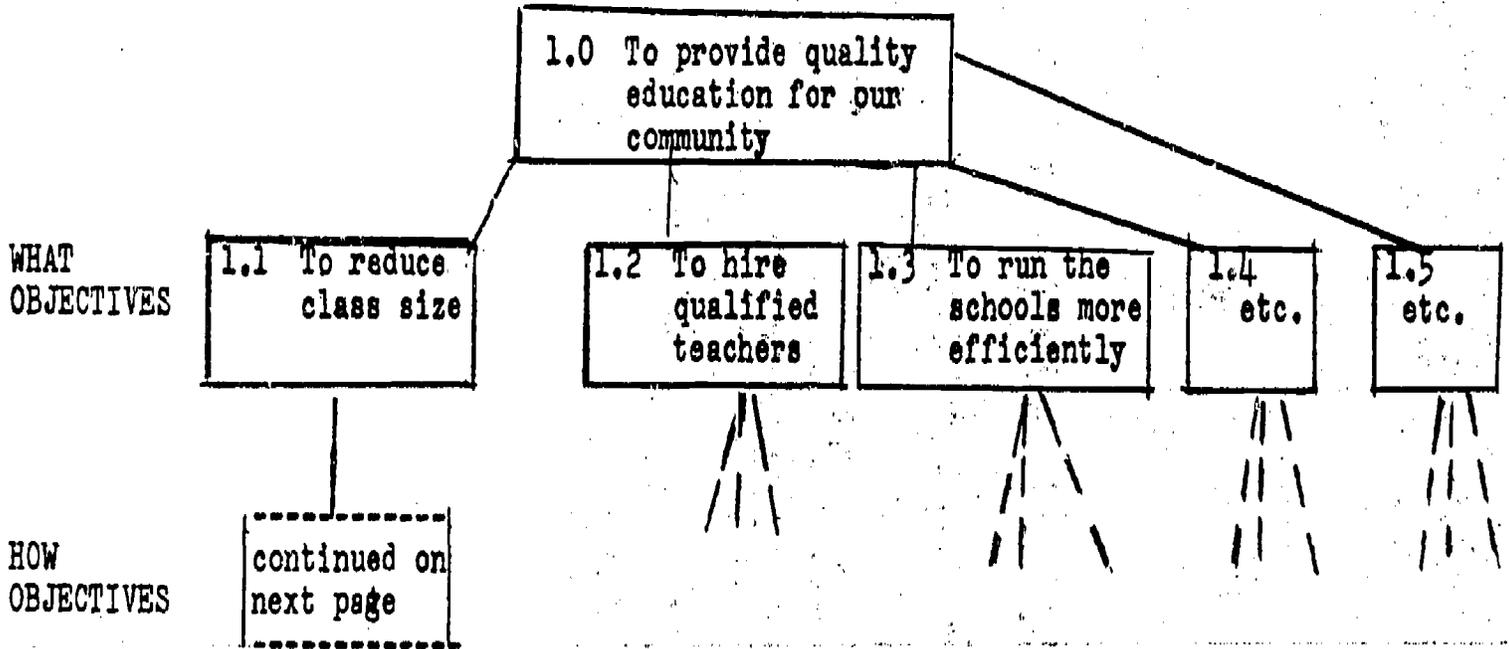
Description	GAP Title	Examples
--- R E A L I T Y T E S T I N G ---		
---- A L T E R N A T I V E S --		
WHEN? The target date for implementation	WHEN OBJECTIVES	1.1.3: To use more volunteers beginning Sept. 1973.
WHERE? Location(s) of activity	WHERE OBJECTIVES	1.1.3: To use more volunteers beginning Sept. 1973 in all elementary classrooms.
WHO? The person or persons involved are described	WHO OBJECTIVES	1.1.3: To use community volunteers, college students and high school students at the ratio of one to every ten elementary students during the school day in each elementary classroom beginning Sept. 1973.

P R I O R I T I Z A T I O N O F P E R F O R M A N C E O B J E C T I V E S

W R I T T E N P L A N

LOGIC MAPPING OF
PERFORMANCE OBJECTIVES IN THE
GAP MANAGEMENT SYSTEM

MISSION OBJECTIVE

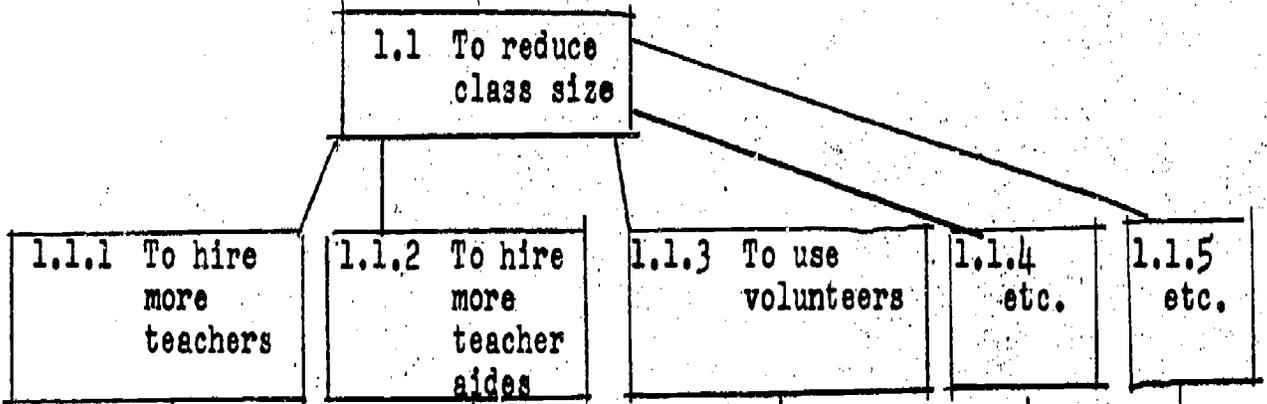


LOGIC MAPPING OF
PERFORMANCE OBJECTIVES IN THE
 GAP MANAGEMENT SYSTEM (continued)

WHAT OBJECTIVE

1.1 To reduce
class size

HOW
OBJECTIVES



R E A L I T Y T E S T I N G

A L T E R N A T I V E S

WHEN
OBJECTIVES

continue on next page

LOGIC MAPPING OF
 PERFORMANCE OBJECTIVES IN THE
 GAP MANAGEMENT SYSTEM (continued)

HOW OBJECTIVE

1.1.3 To use
volunteers

REALITY TESTING
 a) constraints, opportunities
 b) ramifications

ALTERNATIVES

1.1.3 To use more volunteers
beginning Sept., 1973

1.1.3 To use more volunteers
beginning Sept., 1973
in all elementary class-
rooms

1.1.3 To use more community
volunteers, college stu-
dents and high school
students at the ratio of
one to every ten elementary
students during the school
day in each elementary class-
room beginning Sept., 1973

WHEN
OBJECTIVES

WHERE
OBJECTIVES

WHO
OBJECTIVES

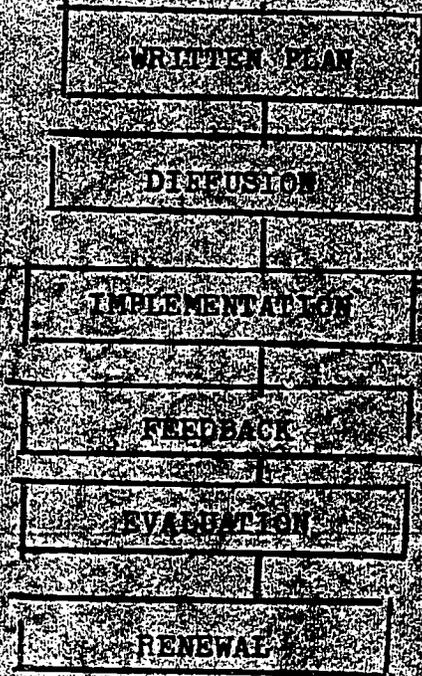
P R I O R I T I Z A T I O N O F P E R F O R M A N C E O B J E C T I V E S

W R I T T E N P L A N

see next page

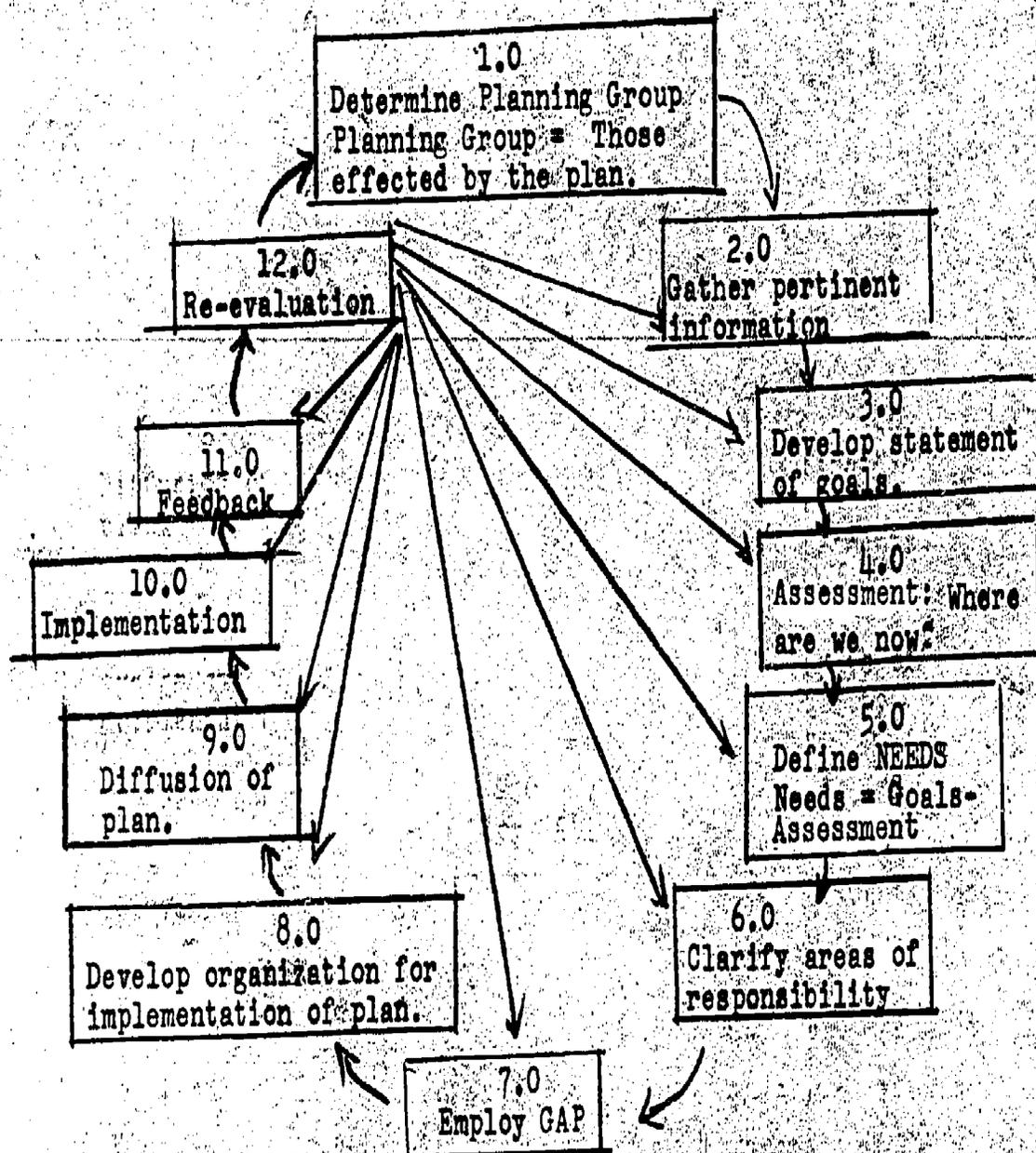
LOGIC MAPPING OF
PERFORMANCE OBJECTIVES IN THE
GAP MANAGEMENT SYSTEM

(continued)



FLOW DIAGRAM OF STEPS IN GAP MANAGEMENT SYSTEM

GAP is but one part of the total school management system. The following flow diagram indicates where GAP fits into the larger system of school planning and management.



APPENDIX A

PROJECT REDESIGN

Mamaroneck Public Schools

CHECKLIST FOR
PLANNING, ORGANIZING, DIRECTING AND CONTROLLING
GAP MANAGEMENT AND PLANNING PROGRAM

It is the intention that the following planning forms be used by administrators, supervisors, and other groups as they see the need at such times when major administrative plans are to be made or reviewed.

It is the recommendation of the sub-committee of the Administrative Council that the checklist be applied only at such times when a guiding format is required. It is the sub-committee's unanimous recommendation that the checklist not get in the way of the process, but facilitate it.

It is the sub-committee's hope and desire that the users of the checklist will feed back diagnostic information in order to improve the system.

Sub-Committee
Administrative Council

John Cox
Bernard Kessler
Milton Meiskin
Calvert Schlick

Joann Stack
Warren Warnecke
Nancy Wyner

GAP MANAGEMENT AND PLANNING PROGRAM

PHASE I

Statement of Need

Statement of Objective

Who perceived the need? (Place date next to appropriate sources):

Internal

External

Evidence

<hr/>	<hr/>	<hr/>

Comments

Problem Validation

Internal

External

Evidence

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Create Awareness of Problem

Who	How	When	Where

Feedback - Evaluation

Description of Feedback and Evaluation Procedures

Outcomes

DIRECTING

Selected Major Activities in the Flanning Process	Community	District Staff	Planning Task Force	Resource Personnel	Students	Superintendent	Other
Establishing the task force*							
Specifying the responsibilities of the task force							
Organizing the task force							
Identifying problems, needs and resources							
Identifying goals							
Developing potential general objectives							
Selecting and recommending goals, general objectives and related programs to the board							
Adopting goals, general objectives and related programs as planning policy							
Recycling the planning process							
Other Activities							

- Legend:
- D = Principal decision maker
 - R₁ = Initiates recommendations
 - R₂ = Concurs in or approves decisions
 - T = Technical responsibility
 - I = Provides relevant information

The Board of Education cannot abrogate those responsibilities mandated by State law.

* The planning task force is defined as those who are affected by the planned change should be on, or have representation on, the planning task force.

Who was involved in planning or who will be involved in planning?*

(Please identify by name and title)

Internal

External

Evidence

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Comments

Feedback - Evaluation

Description of Feedback and Evaluation Procedures

Outcomes

* The planning task force is defined as: those who are affected by the planned change should be on, or have representation on, the planning task force.

PROJECT REDESIGN

IMPLEMENTATION
(DIRECTING AND CONTROLLING)

Selected Major Activities in the Implementation Process (Directing and Controlling)	Community	District Staff	Planning Task Force	Resource Personnel	Students	Superintendent	Other
Creating Team(s) for Implementation Specifying roles and responsibilities of the implementation team(s) Organizing plans for implementation Communicating accumulated data Recycling the process Other Activities							

Legend:

D = Principal decision maker
 R₁ = Initiates recommendations
 R₂ = Reviews, amends and transmits recommendations
 T = Technical responsibility
 I = Provides relevant information
 C = Concurs in or approves decisions

The Board of Education cannot abrogate those responsibilities mandated by State law.

PROJECT REDESIGN

Who was involved in planning and directing or who will be involved in planning and directing? * (Please identify by name and title)

Internal

External

Evidence

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Comments

Feedback - Evaluation

Description of Feedback and Evaluation Procedures

Outcomes

* Please indicate by name and title the members of the planning group who will continue into the planning and directing phase based upon the premise that anyone who is affected by the planned change should be on, or have representation on, the planning task force.

**CONTROLLING
(FEEDBACK AND EVALUATION)**

<p>Selected Major Activities in the Controlling (Feedback and Evaluation) Process</p>	<p>Community</p>	<p>District Staff</p>	<p>Planning Task Force</p>	<p>Resource Personnel</p>	<p>Students</p>	<p>Superintendent</p>	<p>Other</p>
<p>Specifying roles and responsibilities for accomplishing evaluating tasks</p> <p>Administering basic evaluation plan</p> <p>Developing plans for ancillary evaluation</p> <p>Approving plans for ancillary evaluation</p> <p>Administering ancillary evaluation plans</p> <p>Analyzing evaluation data</p> <p>Communicating evaluation data</p> <p>Making appropriate modification within the school system</p> <p>Recycling the total evaluating process</p> <p>Other activities</p>							

- Legend:**
- D = Principal decision maker
 - R₁ = Initiates recommendations
 - R₂ = Reviews, amends and transmits recommendations
 - C = Concurs in or approves decisions
 - T = Technical responsibility
 - I = Provides relevant information

The Board of Education cannot abrogate those responsibilities mandated by State law.

Do the people who are to carry out the task understand the objective? Yes _____ No _____

Evidence:

Do the people who are to carry out the task understand their tasks? Yes _____ No _____

Evidence:

If no, identify skills they will require in order to accomplish objective.

If the people have the skills and are not meeting the objectives, what action is required?

List the evidence that verifies that objective is being met.

SELECTED READINGS

- Argyris, Chris; Interpersonal Competence and Organizational Effectiveness; Richard D. Irwin, Inc.; The Dorsey Press Inc.; Homewood, Illinois; 1962.
- Bennis, Warren A., Benne, Kenneth D., Chin, Robert; The Planning of Change-Readings in the Applied Behavioral Sciences; Holt, Rinehart and Winston; New York; 1966.
- Bertrand, Alvin L., VonBrock, Robert C., et al; Models for Educational Change; Southwest Educational Development Laboratory; Austin, Texas; 1968.
- Chiang, Hung-Min, Maslow, Abraham; The Healthy Personality; Van Nostrand Reinhold Co.; New York.
- Charters, W.W., Jr., et al; Perspectives on Educational Administration and the Behavioral Sciences; Center for the Advanced Study of Educational Administration: University of Oregon; Eugene, Oregon; 1965; pp. 83-93; "Decision Tools for Education"; Werner Hirsch.
- Drucker, Peter F.; The New Society; Harper & Row; New York; 1962.
- Fuller, R.B.; Utopia or Oblivion; Bantam Books; New York; 1969.
- Hill, R. Jean; Toward a Science of Organization; Center for Advanced Study of Educational Administration; Eugene, Oregon; 1968.
- Katz, D. & Kahn, R.L; The Social Psychology of Organizations; Wiley; New York; 1966.
- Kazmier, Leonard J.; The Principles of Management; McGraw-Hill Book Co.; New York; 1964.
- Kepner, Charles, Tregoe, Benjamin; The Rational Manager; McGraw-Hill Book Co.; New York; 1965.
- Likert, Rensis; The Human Organization-Its Management and Value; McGraw-Hill Book Co.; New York; 1967.
- Litterer, Joseph A.; Organizations, Structure and Behavior; John Wiley and Sons, Inc.; New York; 1963; Volume 1.
- Mager, Robert F.; Preparing Instructional Objectives; Fearon Publishers, Palo Alto, California; 1962.
- Newman, William H.; The Process of Management; Prentice Hall Inc.; Englewood Cliffs, N.J.; second edition; 1967.

- Odiorne, George S.; Management By Objectives; Pitman Publishing Corp.; New York; 1971.
- Pfeiffer, John; New Look at Education; Odyssey Press; New York; 1968.
- Rogers, Carl R.; Freedom to Learn; Chase Merrill Publishing Co.; Columbus, Ohio; 1969.
- On Becoming a Person; Houghton Mifflin Co.; Boston, Mass.; 1961.
- Toffler, Alvin; Future Shock; Random House; New York; 1970.
- Weiner, Norbert; The Human Use of Human Beings; Avon Books; New York; 1954.
- Zoll, Allen A. III; Dynamic Management Education; Addison Wesley Publishing Co., Inc.; Philippines; 1966.
-
- Antin, Arthur P., Whritiner, John A.; *Program Planning*; (Unpublished Paper); White Plains Public Schools; White Plains, N.Y.
- Cook, Desmond L.; *Program Evaluation and Review Techniques*; OE-12024; Cooperative Research - Monograph No. 17; U.S. Department of Health, Education and Welfare: Office of Education; U.S. Government Printing Office; Washington, D.C.; 1966.
- Kessler, Bernard M.; *Behavioral Mappings*; (unpublished Paper); Board of Education; Mamaroneck Public Schools; 740 W. Boston Post Rd., Mamaroneck, N.Y. 10543; 1972.
- Mouton, J.S. and Blake, R.R.; *University Training in Human Relations Skills*; Group Psychotherapy; Volume XIV; Nos. 3-4; September-December, 1961; pp. 140-153.
- Changing Supervision for Changing Times*; A.S.C.D.; N.E.A.; Washington, D.C.; 1969.
- Humanizing Education: The Person in the Process*; A.S.C.D.; N.E.A.; Washington, D.C.; 1967.
- Journal of Applied Behavioral Science; NTL Institute for Applied Behavioral Science; Associated with N.E.A.; Washington, D.C.; 1971; Volume 7, Nos. 1, 2, 3.
- Nebraska Symposium on Motivation; Marshall R. Jones, Editor; Abraham Maslow, David C. McClelland, James Olds, Helen Peak, Julian B. Rotter, Paul Thomas Young; University of Nebraska Press; Lincoln, Nebraska; 1955.

Personalized Supervision; Louise M. Berman and Mary Lou Usery;
A.S.C.D.; N.E.A.; Washington, D.C.; 1966.

Program Evaluation and Review Techniques; Bureau of Research; U.S.
Printing Office; Washington, D.C.; 1966.

Supervision: Emerging Profession; Readings from Educational
Leadership; A.S.C.D.; N.E.A.; Washington, D.C.; 1969.

Supervision: Perspectives and Propositions; A.S.C.D.; N.E.A.;
Washington, D.C.; 1967.

The Supervisor: New Demands, New Dimensions; A.S.C.D.; N.E.A.;
Washington, D.C.; 1969.

